IN THE CLAIMS

1. (Currently Amended) A wavelet inverse transform device comprising:

~~first~~ decoding object coefficient extracting means for extracting, from a plurality of wavelet transform coefficients, ~~first~~ partial coefficients necessary for decoding a specified area of a picture; and

~~first~~ wavelet inverse transform means for inverse transforming said extracted ~~first~~ partial coefficients~~;~~

~~second decoding object coefficient extracting means for extracting from a plurality of wavelet transform coefficients, second partial coefficients necessary for decoding a specified area of a picture; and~~

~~second wavelet inverse transform means for inverse transforming said extracted second partial coefficients and said first partial coefficients transformed by said first wavelet inverse transform means,~~

wherein said extracted partial coefficients are wavelet transform coefficients that include said specified area of every hierarchically band split band components and outside said specified area.

2. (Original) The wavelet inverse transform device according to claim 1 further comprising:

decoding object are determining means for determining a decoding object area, said decoding object coefficient extracting means extracting coefficients necessary for decoding an area determined by said decoding object area determining means.

3. (Original) The wavelet inverse transform device according to claim 1 wherein said wavelet transform coefficients are made up of transform coefficients of a plurality of splitting levels and include transform coefficients inside of and on an outer rim side of each splitting level based specified area.

4. (Original) The wavelet inverse transform device according to claim 1 wherein transform coefficients on the outer rim side of the specified area extracted by said decoding object coefficient extracting means correspond to the number of impulse response of a filter used in said wavelet inverse transform means.

5. (Original) The wavelet inverse transform device according to claim 3 wherein said wavelet transform coefficients are obtained on hierarchically splitting a low range component of a plurality of splitting levels.

6. (Original) The wavelet inverse transform device according to claim 1 wherein, of transform coefficients generated by said wavelet inverse transform means, those in a valid range based on overlap holding processing are extracted.

7. (Original) The wavelet inverse transform device according to claim 6 wherein extraction of the coefficients in the valid range based on said overlap holding processing is performed from one level of the wavelet splitting to another.

8. (Currently Amended) A wavelet inverse transform method comprising the steps of:

~~a~~ extracting, from a plurality of wavelet transform coefficients, ~~first~~ partial coefficients necessary for decoding a specified area of a picture; and

transforming said extracted ~~first~~ partial coefficients of said specified area~~;~~

~~extracting from a plurality of wavelet transform coefficients, second partial coefficients necessary for decoding a specified area of a picture; and~~

~~inverse transforming said extracted second partial coefficients and said first partial coefficients transformed by said first wavelet inverse transform means,~~

wherein said extracted partial coefficients are wavelet transform coefficients that include said specified area of every hierarchically band split band components and outside said specified area.

9. (Currently Amended) A wavelet decoding device comprising:

entropy decoding means for entropy decoding an encoded bitstream, generated on wavelet inverse transforming a picture;

~~first~~ decoding object coefficient extracting means for extracting, from a plurality of wavelet transform coefficients obtained by said entropy decoding means, ~~first~~ partial coefficients necessary for decoding a specified area of said picture; and

~~first~~ wavelet inverse transform means for inverse transforming said extracted ~~first~~ partial coefficients of said specified area~~;~~

~~second decoding object coefficient extracting means for extracting from a plurality of wavelet transform coefficients, second partial coefficients necessary for decoding a specified area of a picture; and~~

~~second wavelet inverse transform means for inverse transforming said extracted second partial coefficients and said first partial coefficients transformed by said first wavelet inverse transform means,~~

wherein said extracted partial coefficients are wavelet transform coefficients that include said specified area of every hierarchically band split band components and outside said specified area.

10. (Original) The wavelet decoding device according to claim 9 further comprising:

dequantizing means to restore wavelet transform coefficients obtained by said entropy decoding means to restore wavelet transform coefficients, said decoding object coefficient extracting means extracting coefficients necessary for decoding the specified area from among the wavelet transform coefficients obtained by said dequantizing means.

11. (Original) The wavelet decoding device according to claim 9 wherein

decoding object area determining means for determining a decoding object area, said decoding object coefficient extracting means extracting coefficients necessary for decoding an area determined by said decoding object area determining means.

12. (Original) The wavelet decoding device according to claim 9 wherein

said wavelet transform coefficients are made up of transform coefficients of a plurality of splitting levels and include transform coefficients inside of and on an outer rim side of each splitting level based specified area.

13. (Original) The wavelet decoding device according to claim 9 wherein transform coefficients on the outer rim side of the specified area extracted by said decoding object coefficient extracting means correspond to the number of impulse response of a filter used in said wavelet inverse transform means.

14. (Original) The wavelet inverse transform device according to claim 12 wherein said wavelet transform coefficients are obtained on hierarchically splitting a low range component of a plurality of splitting levels.

15. (Original) The wavelet inverse transform device according to claim 9 wherein, of transform coefficients generated by said wavelet inverse transform means, those in a valid range based on overlap holding processing are extracted.

16. (Original) The wavelet inverse transform device according to claim 15 wherein extraction of the coefficients in the valid range based on said overlap holding processing is performed from one level of the wavelet splitting to another.

17. (Currently Amended) A wavelet decoding method comprising the steps of:

entropy decoding an encoded bitstream, generated on wavelet inverse transforming a picture;

extracting, from a plurality of wavelet transform coefficients obtained by said entropy decoding means, ~~first~~ partial coefficients necessary for decoding a specified area of said picture; and

inverse transforming said extracted ~~first~~ partial coefficients of said specified area;

~~extracting from a plurality of wavelet transform coefficients, second partial coefficients necessary for decoding a specified area of a picture; and~~

~~inverse transforming said extracted second partial coefficients and said first partial coefficients transformed by said first wavelet inverse transform means,~~

wherein said extracted partial coefficients are wavelet transform coefficients that include said specified area of every hierarchically band split band components and outside said specified area.

18. (Original) The wavelet decoding method according to claim 17 further comprising:

a dequantizing step of dequantizing the quantized coefficients obtained by said entropy decoding step, said decoding object coefficient extracting step extracting coefficients necessary for decoding the specified area from among the wavelet transform coefficients obtained by said dequantizing step.

19. (Canceled)

20. (Previously Presented) The wavelet inverse transform device according to claim 8, wherein extracting steps extract transform coefficients outside said specified area that are necessary for decoding at least one of said transform coefficients inside said specified area.

21. (Canceled)

22. (Previously Presented) The wavelet inverse transform device according to claim 17, wherein extracting steps extract transform coefficients outside said specified area that are necessary for decoding at least one of said transform coefficients inside said specified area.